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Nitrogen

Condenser

Cas
Treatment
and
Analysis

Oxidizing
Reservoir
Vessel 1

Air
Compressor

(57) Abstract: Disclosed is a method of producing trimellitic acid through the liquid-phase oxidation of pseudocumene in acetic acid. The oxidation comprises a) conducting a first oxidation using an initial oxidizing catalytic system at 120-200;É for 5-20 min in an oxidizing reactor, said initial oxidizing catalytic system comprising at least three compounds selected from the group consisting of cobalt compound, manganese compound, zirconium compound and bromine compound: b) conducting a second oxidation in situ at 160-220 É for 30-60 min under addition of an additional catalytic system, said additional catalytic system comprising at least two compounds selected from the group consisting of cobalt compound, manganese compound, zirconium compound, and bromine compound; and c) completing the oxidation of pseudocumene at a temperature from 180 to 230; É for a time from 5 to 20 min without the addition of catalysts into the reactor. The pressure is adjusted in the range from 100 to 450 psig over the steps a), b) and c).

Storage and Injection of Reactant